LYNCHBURG CITY COUNCIL Agenda Item Summary

MEETING DATE: July 11, 2006, Work Session AGENDA ITEM NO.:

CONSENT: REGULAR: X CLOSED SESSION: (Confidential)

ACTION: INFORMATION: X

ITEM TITLE: County Water Contract Update

<u>RECOMMENDATION:</u> Proceed to develop long term water contracts with the Service Authorities of Amherst, Bedford, and Campbell County based upon the methodology presented.

SUMMARY: Current water contracts with the Counties were extended for a period of one year through June 30, 2006 while a Cost of Service Study was conducted. The Cost of Service Study was prepared by Black & Veatch Corporation and based on an industry standard methodology as recommended by the American Water Works Association, "AWWA". The goal of the study was to fairly allocate the cost of water production and delivery to particular customers based on annual usage and peak rates of demand. This helps provide rate stability for the region by encouraging the utilization of the capacity in City's system, defraying supply and treatment capital investments in counties, and spreading future City capital investments over a larger customer base.

Revenue requirements were determined by a "Utility Basis" approach and include elements of O&M expense, depreciation, and return of rate base. Costs were then allocated on a "Commodity-Demand" methodology based on level of water service provided. An outside-city "Return Factor" was then calculated and applied. This factor includes a premium for risks involved in providing service to outside-city customers.

PRIOR ACTION(S):

- September 28, 2004, Work Session: Water Resources Planning 101 Water Contracts with Counties.
- June 28, 2005, Council Meeting: County Water Contract Extensions.

<u>FISCAL IMPACT:</u> Fiscal Impact Tables are attached showing: (1) FY 2006 and FY 2007 Provisional Rate Comparison, (2) FY 2007 Budget Revenue Comparison, (3) Comparison of Typical Customer Water Bills between the City and the Counties.

CONTACT(S): Tim Mitchell, Director of Utilities 455-4252

L. Kimball Payne, III, City Manager 455-3946

ATTACHMENT(S): Water Utility Cost of Service Study - Executive Brief

Fiscal Impact Tables

REVIEWED BY: lkp

Executive Brief

Water sales contracts between the City of Lynchburg and the water authorities of Amherst County, Bedford County, and Campbell County expired in July 2005. By mutual agreement these contracts were extended for an additional year to provide time for a study of the costs to provide water service to the counties by an outside consultant. Black & Veatch Corporation was selected to perform the study using a universally accepted methodology for developing the "costs of service" as recommended by the American Water Works Association (AWWA).

A goal in any study of this type is to use a methodology that will fairly allocate the utility's costs of treated water production to a particular customer based upon the degree to which that customer uses the utility's facilities in terms of annual usage and peak rates of demand. Numerous meetings were held between the consultant and the utility managers to review the processes used during the study and to ensure consensus that this goal was being fairly met.

The rate study process contained the following steps:

- Develop the projected revenue and revenue requirements for the operation of the City's water system. Three specific objectives had to be met:
 - a. Provide adequate revenues for self-sufficient funding of the City's water enterprise fund.
 - b. Maintain sufficient debt service coverage.
 - c. Provide sufficient year-end operating funds.
- 2. Allocate these costs to the appropriate functional cost center of the utility (treatment, transmission, distribution, etc.); and then to the different customer classes based upon how they used these facilities. In this analysis the following proposed methodology, consisting of industry accepted methods recommended by AWWA, was employed:
 - a. Revenue requirements were calculated on a "Utility Basis," including O&M expense, depreciation, and return on rate base.
 - The costs were allocated using the "Commodity Demand" methodology. This methodology allocates costs in proportion to the average usage and peak usage patterns of each customer class
 - c. All allocations were "System Based." The utility managers agreed that it was more practical to allocate costs for the entire system to all customer classes rather than identifying discrete portions of the City's water system that serve each specific customer class. This approach provides better overall long-term rate stability for the region.
 - d. A system weighted rate of return on the value of the assets used in producing water was calculated reflecting the cost of debt and a standard rate of return on the City's equity

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- (ownership) in its water system. The equity return factor was based upon 30-year treasury bond yields.
- e. An outside city rate of return was calculated for the Counties that was 1.415 times the system weighted rate of return. This was calculated by adding 2.00% to the system weighted rate of return calculated in d. above.
- 3. Using this proposed methodology the following <u>City average costs and County</u> rates were proposed for the fiscal year 2007.

FY 2006 and FY 2007 Provisional Rate Comparison

	City Average Cos	City Average Costs and County Rates	
	Current	Proposed	
Customer Class	FY 2006	FY 2007	
	\$/Ccf	\$/Ccf	
City ¹	1.82	1.87	
Amherst County ²	1.88	1.69	
Bedford County ²	1.79	1.77	
Campbell County ²	1.88	1.77	

Notes: ¹Represents average cost per Ccf. Includes meter charge and inside-city wholesale revenue.

Additional important findings identified in the study:

- The City's water system is underutilized. Selling water to the Counties lowers the average costs the
 City must charge its customers. The study analysis indicated that the City's average water rate to its
 customers was lowered approximately 20% by using the excess treatment capacity to produce and
 sell water to the Counties.
- Using water regionally helps defray future investments by the counties in water supply and treatment facilities.
- 3. Using water regionally spreads future repair and replacement capital investments in the City's system over a larger customer base.
- 4. The current rate methodology produces similar results in comparison with the proposed methodology.
- 5. The utility managers were unanimous in their support and recommendation of the proposed methodology.



²Provisional rates subject to change based on actual costs and operating data.

⁻ Ccf = 100 cubic feet

FISCAL IMPACT TABLES

TABLE 1 FY 2006 and FY 2007 Provisional Rate Comparison

	FY 2006	Proposed FY2007
Customer Class	\$/Ccf*	\$/Ccf*
City ¹	1.82	1.87
Amherst County ²	1.88	1.69
Bedford County ²	1.79	1.77
Campbell County ²	1.88	1.77

^{*} Ccf = 100 cubic feet

Notes: ¹ Represents average cost per Ccf. Includes meter charge and inside-city wholesale revenue.
² Provisional Rates subject to change based on actual costs and

TABLE 2 FY 2007 Budget Revenue Comparisons

Customer Class City ¹	Adjusted Budget Analysis \$6,955,000	Cost of Service Study \$6,869,000	Difference \$(88,000)
Amherst County	131,000	127,000	(4,000)
Bedford County ²	1,289,000	1,378,000	90,000
Campbell County	435,000	442,000	8,000
Total	8,810,000	8,816,000	6,000

Notes: 1 Represents city water revenue including: water sales, meter charges, and inside-city contract revenues.

Increased budgeted revenue to reflect anticipated increase in water sales.

operating data.

TABLE 3 Comparison of Typical Customer Bills

Jurisdiction	Proposed FY 2007 Typical Water Bill ¹
City	\$15.08
Amherst County	\$24.93
Bedford County	\$30.47
Campbell County	\$31.35

Notes: ¹Represents typical customer bill based on 7 Ccf per month consumption.